

### **REMARKS**

The Official Action mailed August 19, 2009, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Filed concurrently herewith is a *Request for Continued Examination*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on May 25, 2006; October 18, 2006; December 23, 2008; and May 18, 2009.

Claims 27-36 and 47-56 are pending in the present application, of which claims 27 and 47 are independent. Claims 27, 34, 47 and 54 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 3 of the Official Action rejects claims 27-35 and 47-55 as obvious based on the combination of U.S. Patent No. 5,757,026 to Forrest and U.S. Patent No. 6,566,807 to Fujita. Paragraph 4 of the Official Action rejects claims 27-36 and 47-56 as obvious based on the combination of Forrest and U.S. Patent No. 6,917,159 to Tyan. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found

either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 27 and 47 have been amended to recite an anode and a cathode, wherein a first layer, a second layer, and a third layer are interposed between the anode and the cathode, and sequentially formed in such a way that the third layer is formed to be in contact with the cathode. The amendment is supported in the specification, at least, by Figure 1. For the reasons provided below, Forrest, Fujita and Tyan, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action asserts that "Forrest et al. show in Fig. 2C and related text... a pair of electrodes 26/38; and a first layer 22E ... ; a second layer 21T ... ; and a third layer 20H ... , wherein the first layer, the second layer, and the third layer are interposed between the pair of electrodes and sequentially formed in such a way that the third layer is formed to be in contact with one of the pair of electrodes" (Paper No. 20090813, page 2). However, Forrest only potentially discloses that hole transporting layer 20H (asserted third layer) is in contact with an anode. See Figure 2C. Therefore, the Applicant respectfully submits that Forrest does not teach or suggest that a third layer is formed in contact with a cathode, as recited in the amended claims.

Furthermore, it is respectfully submitted that the present invention achieves an advantage, described in paragraph [0050], that an optical path can be controlled by increasing the thickness of the third layer that can produce holes and move them.

Forrest does not disclose such a feature and does not appear to achieve this advantage.

Fujita and Tyan do not cure the deficiencies in Forrest. The Official Action relies on Fujita to allegedly teach that the second layer contains a first material or metal having an electron donor property for the first organic compound, and the third layer contains a second material or metal oxide having an electron acceptor property for the second organic compound (Paper No. 20090813, pages 3 and 6). However, Forrest, Fujita and Tyan, either alone or in combination, do not teach or suggest that a first layer, a second layer, and a third layer are interposed between the anode and the cathode, and sequentially formed in such a way that the third layer is formed to be in contact with the cathode. Since Forrest, Fujita and Tyan do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,



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